

United States Department of Interior

National Park Service
Salt River Bay National Historical Park and Ecological Preserve
2100 Church Street, #100
St. Croix, Virgin Islands 00820
(340) 773-1460

FINDING OF NO SIGNIFICANT IMPACT

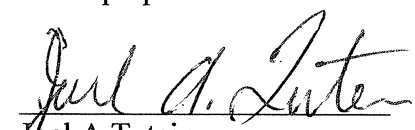
**Proposed Marine Research and Education Center
and Abandoned Hotel Demolition**

The preferred alternatives for the abovementioned projects do not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The preferred alternatives will not have a significant adverse effect on the human environment. There are no unmitigated adverse effects to physical resources, water resources, natural resources, cultural resources, or other unique resources within the region. No highly uncertain or controversial impacts, unique or unknown risks, or known cumulative effects were identified.

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal actions are consistent with existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that they will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102 (2)(c) of NEPA.

Based on the foregoing, it has been determined that an EIS is not required for these projects and thus will not be prepared.

Recommended:

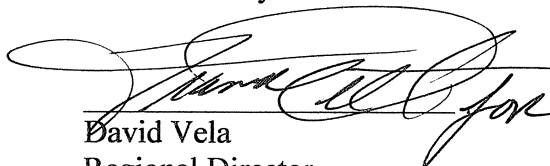

Joel A Tutein
Superintendent

Date:

1/30/09

Salt River Bay National Historical Park and Ecological Preserve

Approved:



David Vela
Regional Director
Southeast Region

Date:

02/12/09

FINDING OF NO SIGNIFICANT IMPACT

Proposed Marine Research and Education Center and Abandoned Hotel Demolition

INTRODUCTION

The Salt River Bay National Historical Park and Ecological Preserve (SARI) is located along the north/central coast of St. Croix, United States Virgin Islands (USVI). The SARI is jointly managed by the National Park Service (NPS) and the Government of the Virgin Islands. The SARI was created to preserve, protect, and interpret nationally significant natural, historical, and cultural resources. The SARI contains a combination of marine, estuarine, and terrestrial habitats including coral reefs, seagrass beds, an undersea canyon, and one of the largest remaining mangrove forests within the USVI. Salt River Bay also contains prehistoric and colonial-era archaeological sites and ruins that are found in this dynamic tropical ecosystem.

Concerns over the state of the 93 million acres of coral reef under U.S. jurisdiction have led to the partnership of the NPS, the Joint Institute for Caribbean Marine Studies (JICMS), and the Department of Commerce/National Oceanographic and Atmospheric Administration (NOAA). The JICMS is a university-based organization consisting of four initial members, including the University of North Carolina at Wilmington, the University of the Virgin Islands, Rutgers, and the University of South Carolina. The NPS has worked extensively with NOAA's Centers for Coastal Ocean Science, Center for Coastal Monitoring and Assessment's Biogeography Branch who have shown keen interest and intent in partnering on this project.

The NPS has proposed two projects at the SARI. The projects include the construction and operation of a Marine Research and Education Center (MREC) and the demolition of an abandoned hotel structure located on the east side of SARI.

Prior to Hurricane Hugo, hundreds of students and researchers studied St. Croix's marine environment at the Fairleigh Dickinson University's West Indies Laboratory and NOAA's National Undersea Research Program facility located in Salt River Bay and at the West Indies Laboratory's Teague Bay, St. Croix's east end campus. These two facilities were closed after being damaged by the hurricane. The JICMS has long considered St. Croix the most desirable location to establish a new MREC. St. Croix's central location within the Caribbean region, the rich coral reef research history of St. Croix, and the availability of the site at Salt River Bay, which is owned and managed by the NPS, make it a perfect location for the MREC. The MREC will have programs to promote the sustainable utilization and conservation of marine resources through sound scientific principles with application throughout the Caribbean and the southern United States. Three alternative locations for the MREC were evaluated in the Environmental Assessment (EA). Locations included one on the eastern side of the Salt River Bay on NPS property adjacent to Estate Judith's Fancy; one at the southern edge of Salt River Bay on private land on the site of the former NOAA Undersea Research Center; and one on the western side of the Salt River Bay including the NPS Visitor Contact Station and the privately owned Salt River Marina. The MREC facilities will include a series of buildings and other

structures of approximately 35,000 square feet, not including parking, roads, and related site improvements.

The abandoned hotel structure was part of a development project started in the late 1960s that encompassed Hemer's Peninsula adjacent to Estates Judith's Fancy. The hotel structure was abandoned following partial completion in the 1970s. Currently, the structure is deteriorating and presents a safety and environmental concern for SARI. The park proposes to remove the entire structure, reuse and recycle as much of the material as possible, and rehabilitate the site to a more natural condition. In addition, the NPS proposes to construct a haul road to connect into Route 79 for equipment access, removal of hotel debris, and ultimately to become the new park access road to the eastern side of SARI.

PREFERRED ALTERNATIVE

Marine Research and Education Center

The Preferred Alternative, the East Site Alternative, will be located north and west of the Estate Judith's Fancy residential community. The NPS owns approximately 70 acres of land at this site, which was re-landscaped by a developer in the 1960's cutting unnatural contours into the hillside. The building facilities for the MREC will be constructed at the end of an access road that will run east of the lagoon. The boat launch, water tanks, and boat dock will be located on the northern end of the lagoon. East of the wet lab/boat dock and up the hill will be a parking lot for the Education Center. The cafeteria, library, Curatorial Center, and Student Center will be located across from the Education Center. To the north will be the dormitories which will be built into the hillside below the ridgeline. No structures will rise above the current hillside contour. To the south will be the Maintenance Building for vehicles and boats above 20 foot contour and out of the flood plain. A small parking area for cars and boat trailers will be located adjacent to the Maintenance Building. The Maintenance Building will be screened from the nearby community so as to minimize its visual impact.

The MREC will require a seawater intake line that will be either routed under the peninsula or along the Salt Pond to an appropriate intake point in the ocean. The water tanks at the lagoon will be connected by seawater supply pipeline to the MREC so the high quality seawater will be available at the center for experimental work.

All buildings will be low profile structures and shielded by native plantings to minimize visual intrusion to adjacent residents and to the mangroves/wetlands. The buildings will be hurricane resistance, constructed of green materials, and energy efficient. The facilities will be constructed in a location and manner to minimize the disturbance to the viewshed of the Columbus Landing site located across the bay.

Demolition of Abandoned Hotel

The proposed action includes the demolition and removal of the existing partially constructed hotel structure and abandoned building materials, construction of a haul road, and the return of

the developed area to a more natural, vegetated setting. The haul road will be constructed from the abandoned hotel site around the lagoon to the beginning of the former historic access road. The haul road will continue south and connect with Route 79. The haul road will be used for equipment access and removal of debris, which will be recycled, relocated for re-use, or disposed of at the Anguilla Municipal Landfill. The hotel will be mechanically demolished. Following demolition, the site will be rehabilitated, revegetated with native plants, and returned to a more natural condition providing for bird nesting habitat and recreational opportunities consistent a natural area. The haul road will be improved and converted into a low traffic access road and entrance for the east side of SARI.

OTHER ALTERNATIVES CONSIDERED

Marine Research and Education Center

South Site Alternative: The South Site Alternative is located at the former NOAA Undersea Research Center on the southern edge of Salt River Bay. The 58-acre parcel of land is privately owned and includes several structures and a bulkhead on the water for docking boats.

The cafeteria, dormitories, and Student Center will be constructed along an existing road located on the property. The Education Center will be located about 500 feet from the water's edge at a bend in the road. The road will continue along the western and northern sides of the building and continue to a drop-off area at the boat dock adjacent to the Education Center at the shoreline. East of the Student Center will be a parking lot connecting back to the road, as well as dormitories and cafeteria building in a line roughly parallel to the Student Center parking lot.

The boat dock and Education Center will be connected to the wet lab and Maintenance Building by a path along the water. A second road south of the Education Center access road will be constructed to connect to a boat launch at the bay and to provide separate access to the wet lab and Maintenance Building. The seawater intake line will be routed through Triton Bay and Salt River Bay to an appropriate intake point in the ocean. The seawater intake system will connect directly to the wet lab.

West Site Alternative: The West Site Alternative encompasses two non-contiguous areas: the NPS Visitor Contact Station and the Salt River Marina. The NPS Visitor Contact Station is located on the northwest shore of the bay. This site is made up of several parcels of approximately 6.0 acres in all and includes a split-level house, guest quarters, accessory structures and a community beach. The Salt River Marina hugs the shoreline on approximately 14 acres along the western edge of the bay. The Marina is privately owned and includes buildings used for maintaining, constructing and painting boats, as well as for office space, and parking lots for marina guests. The shoreline consists of long sections of steel bulkheads with docking facilities. Several mooring buoys are available in the bay.

Most of the building program will be located on the NPS Visitor Contact Station site. This will include administration, the Student Center, Education Center, cafeteria building, and dormitories converted from the existing residential buildings (currently the NPS Visitor

Contact Station). The Maintenance Building and wet lab will be located at the marina. These facilities will either be constructed as new or located in an existing building.

The seawater intake line will be routed from the Education Center to an appropriate intake point in the ocean. Water holding tanks may be located near the Education Center or down at the marina, with a pipe connecting the Education Center and wet lab along the public right-of-way.

No-Action Alternative: Under the No-Action Alternative, a MREC will not be constructed within the boundaries of SARI. Current activities (i.e., scuba diving, snorkeling, kayaking, and hiking) will continue at SARI if the MREC is not constructed. Unauthorized access of off-road vehicles will continue at the East Site. This activity will continue to contribute to the erosion problems at the site, ultimately to the water quality issues in the bay, and wildlife disturbances. The South Site is currently privately owned and offers no park activities, it will continue as a privately owned site. At the West Site, the NPS Visitor Contact Center will continue to operate as the SARI's Visitor Center and the marina will continue to operate as a privately owned marina.

Demolition of Abandoned Hotel

Under the No-Action Alternative, the abandoned and partially completed hotel structure will remain on the site and not be demolished. Debris and discarded building materials located throughout the peninsula will not be removed preventing this area from being revegetated or rehabilitated to return the area to a more natural condition. The abandoned hotel will continue to deteriorate and will continue to present a safety and environmental concern for SARI.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is determined by applying the criteria from Section 2.7 (D) of NPS Director's Order 12. These are the same criteria outlined in the NEPA, which is guided by the Council of Environmental Quality (CEQ) regulations. The CEQ regulations provide direction that "the environmentally preferable alternative is the alternative that will best promote the national environmental policy" as expressed in Section 101(b) of NEPA:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain whenever possible, an environment that supports diversity and variety of individual choices;

5. Achieve a balance between population and resource use that would permit high standards of living and wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Marine Research and Education Center

The Preferred Alternative (East Site Alternative) has been selected as the environmentally preferred alternative. Although the three alternatives result in similar adverse impacts to the natural and human environment, implementation of the MREC as the Preferred Alternative results in more beneficial impacts to the resources in SARI. Establishment of the MREC at the East Site will provide long term environmental and cultural education opportunities provide an opportunity for mangrove restoration and rehabilitation of the peninsula; and with NPS control and presence at the site, protection of the property from off road vehicle access which damages the wetlands and mangroves. The Preferred Alternative will meet SARI purposes and NEPA goals by improving and preserving the natural resources, and protecting and enhancing cultural resources. Thus, the Preferred Alternative is the environmentally preferred alternative because it will be providing protection to natural, cultural, and archaeological resources through preservation, conservation, education and research for which SARI was established.

Demolition of Abandoned Hotel

The proposed action was determined as the environmentally preferred alternative due to the long-term beneficial impacts associated with the demolition and removal of the abandoned hotel structure. The implementation of the proposed action will result in short-term, minor, adverse impacts to SARI's resources, but the long-term benefits of the proposed action far outweigh these short-term, minor, adverse impacts anticipated during demolition and construction of the proposed action. Some of the benefits to SARI from the proposed action include improved water quality in the bay, a permanent increase of approximately 7 acres of habitat, and improving the historic viewshed of the bay.

THE PREFERRED ALTERNATIVE AND SIGNIFICANCE CRITERIA

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an Environmental Impact Statement (EIS):

The construction phase of the MREC, installation of the seawater supply pipeline, and maintenance dredging will have short-term, minor, adverse effects to the soils and sediments, air quality, noise, water quality, coral reef/hardbottom substrate, vegetation, and fish. The

impacts associated with these actions would be further analyzed in future permit applications (i.e., Section 10/404) and appropriate coordination and consultation would occur following the signing of this Finding of No Significant Impact (FONSI). Additionally, long-term, minor, adverse effects to the 100-year floodplain and the Coastal Barrier Resource System areas will result from the construction phase of the project. Construction of a boat dock and ramp at the site will also result in short-term, minor, adverse impacts to the soils and sediments, water quality, fish, and mangroves/wetlands. The proposed project will impact a total of 0.03 acres of mangroves and 1.04 acres of wetlands/open water. The Preferred Alternative is located in Tier 1 of the coastal zone resulting in short-term, minor, adverse impacts from the MREC; however, the project will be consistent, to the maximum extent practicable, with the Virgin Island Coastal Zone Management Plan. Short-term, minor, adverse impacts to the four federally listed sea turtles could occur if the species come into contact with watercraft during construction of the boat dock, sea water pipeline, or during maintenance dredging. However, water construction and dredging activities will be performed to the best extent possible to avoid contact with the sea turtles. Implementation of the MREC will have long-term, minor, adverse effects to hydrology, air quality, noise, and water quality at the site. Proposed maintenance dredging will have long-term, minor, adverse impacts to the bathymetry, sea grasses, and the benthic community at SARI. As stated previously, the impacts associated with these actions would be further analyzed in future permit applications (i.e., Section 10/404) and appropriate coordination and consultation (i.e., Section 7) would occur following the signing of this FONSI.

The demolition of the abandoned hotel and the road improvements will create short-term, minor, adverse impacts to soils, air quality, noise, NPS defined estuarine wetlands (2.8 acres), avian species, and wildlife species. Due to potential increases in water turbidity from the construction activities the proposed action will also create short-term, minor, adverse impacts to the water quality, which will indirectly affect seagrasses, fish, mangroves, essential fish habitat, habitat areas of particular concern, and designated natural areas.

The construction phase of the MREC will result in short-term, minor, adverse effects to recreational resources in the vicinity of SARI, land-base recreational activities, aesthetics, and visitor use at the at SARI. The implementation of the facility will cause minor, long-term, adverse increases in energy and natural resource requirements. Energy conservation will be applied and sustainable resources will be used as applicable.

The demolition of the abandoned hotel and the road improvements will have short-term, minor, adverse impacts to SARI operations, visitor use, and recreation. Activities on the east side of SARI will be restricted until the project is complete as a safety precaution.

Long-term, minor to moderate, beneficial impacts to unique natural areas, recreation, aesthetics, cultural resources, local community and economy, environmental justice, traffic within the Estate Judith's Fancy community, visitor use, and SARI operations will occur from the implementation of the MREC. Maintenance dredging in the Mangrove Lagoon will improve water quality in the lagoon thereby providing a long-term, moderate, benefit to the mangroves. Long-term, minor, beneficial effects to vegetation, avian species, and mammals will result from the replacement of non-native invasive plant species with native vegetation.

The demolition of the abandoned hotel and the road improvements will create long-term, moderate, beneficial impacts to the floodplain, Tier 1 of the coastal zone, coastal barrier resource system areas, seagrasses, fish, migratory bird species (least term), mangroves, essential fish habitat, habitat areas of particular concern, and designated natural areas due to the improvement of water quality from the implementation of erosion and sediment control methodologies, stormwater management techniques, and the rehabilitation and revegetation of the impervious surfaces. The replacement of non-native, invasive species with native plant species will have a long-term, moderate, beneficial impact on the terrestrial wildlife and rare, threatened or endangered species and other vegetation species that inhabit the area. Long-term, moderate, beneficial impacts to the aesthetics of SARI and visitor safety will result from the removal of the abandoned hotel structure.

Impacts from both projects will not be significant and will not result in impairment to SARI resources.

The degree to which the action affects public health and safety:

The MREC facilities will comply with local fire safety, mechanical and electrical codes and regulations. All structures, parking facilities, and visitor circulation paths will meet Americans with Disabilities Act requirements. Strict building standards to achieve increased wind and/or flooding resistance will be adhered to for coastal storm hazards. Mandatory safety requirements as well as non-mandatory precautions will benefit overall visitor experience.

The removal of the deteriorating abandoned hotel structure will create long-term, moderate, beneficial impacts to public health and safety. The hotel structure currently poses a safety hazard to the public due to the deteriorating condition of the hotel. Active demolition areas will be restricted from visitor use until the project is complete.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:

Construction of the MREC would affect two known archaeological sites at SARI (SARI-2.03 and SARI-2.06). The sites are located in the area where the MREC Administration and Education Center and the Maintenance Building would be located. Further archaeological testing in accordance with Section 106 of the National Historic Preservation Act (NHPA) would be required to determine if these sites are eligible for listing on the National Register of Historic Places (NRHP). For these archaeological sites (SARI-2.03 and SARI-2.06), site boundaries would be determined and Phase II-type excavations would be conducted to comply with Section 106 of NHPA. An underwater archaeological survey will be needed to determine the location of submerged cultural resources along the course of the seawater pipeline. However, if a pipeline route can be designed that avoids submerged resources no further treatment for underwater archaeology would be needed. But archaeological testing on land would still need to be conducted on the portions of the seawater pipeline that would be located

on terrestrial areas of the park. Construction of the MREC may result in long-term, minor, adverse effects to the cultural landscape of the area.

A total of 1.07 acres of wetlands will be impacted by the MREC Preferred Alternative. Approximately 0.03 acres of federally-defined mangrove wetlands and approximately 0.38 acres of open water in Mangrove Lagoon will be impacted as a result of the construction of the boat dock and launch. A total of 0.66 acres of a NPS-defined estuarine wetland will be impacted by the wet lab and associated roads/facilities.

No impacts to designated critical habitat for the federally-listed leatherback sea turtle are anticipated from the proposed action. Short-term, minor, adverse impacts to coral reefs and the hardbottom substrate would occur from the installation of the seawater supply line. To minimize impacts to coral reefs from the seawater supply line, the location of the line would be routed to avoid areas of protected species of coral [elkhorn (*Acorpora palmata*) and staghorn coral (*Acropora cervicornis*)] and avoid areas of high density coral reefs. Dredging has the potential to temporarily and locally increase turbidity in Salt River Bay, which will potentially cause short-term, minor, adverse impacts to essential fish habitat and habitat areas of particular concern. However, the educational opportunities and knowledge gained from marine research conducted at the MREC facility will be a major benefit to the unique natural systems at SARI in the long term.

The construction and implementation of the MREC will have no impact to prime and unique farmlands, wild and scenic rivers, or historic resources.

The demolition of the abandoned hotel will have a long-term, major, beneficial impact to the cultural landscape of Salt River Bay. The hotel is currently a visual intrusion to the historic landscape of the bay.

The actual demolition of the abandoned hotel structure will have no impact to wetlands. However, short-term, minor, adverse impacts to approximately 2.84 acres of estuarine NPS-defined wetlands will occur through activities associated with the hotel demolition, including roadway improvement activities and the removal of debris from the peninsula. Long-term, moderate, beneficial impacts to the wetlands will occur as a result of mitigation, which includes restoring the majority of the 2.84 acres of removed vegetation with native vegetation at a 1:1 ratio through the rehabilitation of the peninsula to a more natural setting.

No adverse impacts to ecological critical areas are anticipated as a result of the demolition of the abandoned hotel structure. However, the addition of new nesting areas will result in long-term, moderate, beneficial impacts to the federally listed green and hawksbill sea turtles and listed migratory bird, least tern. Short-term, minor, adverse impacts to essential fish habitat and habitat areas of particular concern may result due to increased turbidity from the roadway construction.

The demolition of the abandoned hotel structure will have no impacts to prime and unique farmlands, wild and scenic rivers, archaeological resources, and historic resources.

Degree to which the effects on the quality of the human environment are likely to be highly controversial:

The overall effects on the human environment will be beneficial as a result of the implementation of the MREC. The MREC will attract more visitors to SARI and will become an integral component of the overall tourism experience for the USVI. Implementation of the MREC will improve the quality of life in the Salt River Bay region by providing additional opportunities for educational programs for students and the general public. The project will result in beneficial impacts to the region by providing additional jobs and educational opportunities.

The human environment, including SARI operations and visitor experience will be subjected to short-term, minor, adverse impacts during the demolition of the hotel structure and associated road improvements. The active areas on the east side of SARI will be restricted from visitor use until the project is complete. The abandoned hotel is currently a safety hazard; therefore, the removal of the hotel will have a long-term, beneficial impact on visitor safety.

There are no highly controversial effects identified during the preparation of the EA or the public review period associated with the MREC or removal of the abandoned hotel.

Degree to which the possible effects on the quality of human environment are highly uncertain or involve unique or unknown risks:

Risks associated with the construction of the MREC include short-term, minor, adverse impacts to aesthetics, recreation, and traffic. During the construction phase land-based recreational opportunities will not be available within the project location. Navigation in the vicinity of the project will be impacted from maintenance dredging and construction of the boat dock and launch. An increase in turbidity in the bay from dredging activities and boat dock construction may in the short-term, decrease the quality of kayaking, snorkeling, and swimming in the area. The aesthetics of the area will be altered from current conditions with the construction of the MREC; however, the MREC buildings will be constructed to blend in as much as possible with the natural surroundings. The increase in visitation at SARI, due to the MREC, will cause an increase in local traffic within the nearby communities, however, traffic will decrease through the Estate Judith's Fancy community since SARI traffic will be diverted to the new public access road.

The demolition of the abandoned hotel structure and road improvements will cause short-term, minor, adverse impacts to some recreational activities and traffic. Land based activities, such as hiking, biking, and swimming will be restricted during the demolition period. Short-term, minor, impacts to traffic will occur to those living along the haul route during the demolition period.

There will be no highly uncertain, unique, or unknown risks associated with the construction and implementation of the MREC or the demolition of the abandoned hotel structure.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:

The implementation of the MREC would benefit the unique natural systems at SARI in the future through the knowledge gained from research conducted at the facility. The MREC would also share information and research and form partnerships with other nations within the Caribbean and adjacent regions with common interests and concerns for the marine environment. Future NPS actions will be evaluated through additional, project-specific planning processes that incorporate the requirements of NEPA and NPS policies. No decision in principle about future considerations can be made from the proposed project.

The demolition of the abandoned hotel structure neither establishes a precedent for future actions with significant effects nor represents a decision in principle for future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts:

Short-term, adverse, minor, cumulative impacts to water quality are anticipated due to the construction of the MREC and demolition of the abandoned hotel structure when added to other past, present, and reasonably foreseeable future actions. Minor incremental cumulative long-term adverse impacts to air quality, noise, and water quality from the implementation of the MREC are anticipated. The adverse cumulative effects on the natural resources from human activity and private development at Salt River Bay would be mitigated through the long-term benefits of the abandoned hotel demolition and removal by enhancing the viability of these natural resources and decreasing impervious areas through revegetation and rehabilitation of SARI. Cumulatively, the proposed actions will have a negligible effect on threatened and endangered species, designated critical habitat, and unique natural systems when considered with other past, present, and reasonably foreseeable future actions. The construction of the MREC facilities will have an overall cumulative benefit to the human environment and visitor use and experience at SARI and the surrounding community.

Degree to which the action may adversely affect districts, sites, highways, or objects listed on the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources:

Construction of the MREC would have an effect on two archaeological sites (SARI-2.03 and SARI-2.06). These sites are located in the area of the proposed MREC Administration and Education Center and the Maintenance Building. Further archaeological testing in accordance with Section 106 of the NHPA will be needed to determine if these sites represent two separate locations or one single site, and if these sites are eligible for listing on the NRHP. The sites have already been disturbed by the construction of the Mangrove Lagoon, as well as by existing dirt roads. For archaeological sites SARI-2.03 and SARI-2.06, site boundaries would be determined and Phase II-type excavations would be conducted to comply with Section 106 of NHPA. Results of a 1989 underwater archaeological reconnaissance survey of Salt River Bay determined that near-shore and off-shore archaeological resources are present within the project location. An underwater archaeological survey would be needed to determine the location of

submerged cultural resources prior to installing the seawater supply pipeline. However, if a pipeline route can be designed that avoids submerged resources, no further treatment for underwater archaeology would be needed. But archaeological testing on land would still need to be conducted on the portions of the seawater supply pipeline that would be located on terrestrial areas of the park.

The MREC will have long-term, minor, adverse impacts to the cultural landscape of the area; however, the landscape of the bay was significantly modified by construction activities in the 1960s. The MREC will be visible from the west and from the Columbus Landing Site. The regeneration of native vegetation will help shield the view of the MREC structures. The only two historic resources at SARI, Fort Sale and a Danish well tower, will not be affected by the construction of the MREC. The NRHP eligibility is unknown for these sites.

There are no known archaeological resources on the location of the abandoned hotel structure. However, construction of the haul road will have an affect on one archaeological site, SARI-2.05. This site has been previously disturbed by the construction of the Mangrove Lagoon and the existing dirt roads, which minimizes the potential for adverse affects to this site. For archaeological site SARI-2.05, site boundaries would be determined and Phase II-type excavations would be conducted. In addition, prior to construction of the haul road, any new areas that would be disturbed would be subjected to systematic archaeological testing, as per Section 106 of NHPA. There will be no adverse affect to historic resources or the cultural landscape from the demolition of the abandoned hotel structure.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat:

The construction of the MREC will not adversely affect endangered or threatened species within the project area. However, operation of the seawater supply pipeline may cause short-term, minor, adverse impacts to coral species if intake occurs during the coral spawning season. If coral spawning is observed, the pipeline intake will be temporarily shutdown. Short-term, minor, adverse impacts to the listed sea turtle species may occur from the construction of the boat dock and ramp and maintenance dredging. To minimize possible watercraft contact with sea turtles, time of year restrictions will be in place during turtle nesting seasons; and in-water surveys will be conducted to determine sea turtle use of the area in the proposed location of the sea water intake line and to avoid any impact to foraging or nesting sea turtles. Short-term minor, adverse impacts to mangrove habitat, identified as critical habitat, are anticipated as a result of the MREC. Mangrove mitigation measures through plantings at a specified ratio of 3:1 will be required to offset the loss of the mangrove habitat.

All listed species expected to occur in the vicinity of SARI are associated with aquatic habitats. Short-term, minor, adverse impacts to adjacent aquatic habitat are expected as a result of the demolition of the abandoned hotel structure and construction of the haul road. However, appropriate erosion and sediment controls and stormwater management techniques will be in place during construction, therefore, no direct adverse impacts to the threatened and endangered species will result from the project. There will be no adverse impacts to critical habitat in the area.

Whether the action threatens a violation of Federal, State, or local environmental protection law:

The implementation of the MREC and the demolition of the abandoned hotel structure will not violate Federal, State, or local environmental protection laws.

IMPAIRMENT STATEMENT

The NPS has determined that the implementation of the MREC, and the demolition of the abandoned hotel structure, will not constitute an impairment of SARI's resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the SARI EA, the public comments received, relevant scientific studies, and the professional judgment of the decision maker guided by the direction in the *NPS Management Policies, 2006*. As described in the EA, implementation of the preferred alternatives will not result in major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of SARI; (2) key to the natural or cultural integrity of SARI; or (3) identified as a goal in SARI's planning documents.

MITIGATION MEASURES FOR THE PREFERRED ALTERNATIVE

To minimize resource impacts, the following mitigation measures were part of the analyses in the EA and will be followed during implementation of the preferred alternatives. These actions will lessen the potential for adverse effects of the preferred alternatives, and have proven to be very effective in reducing environmental impacts on previous projects.

MITIGATION MEASURES

Impact Topic	Mitigation Measure(s)
Soils	<ul style="list-style-type: none">• Staging and stockpile areas will be located in previously disturbed sites to minimize the amount of ground disturbance.• Construction/demolition zones will be identified and fenced prior to any activity. Workers will avoid activities outside of these zones.• If new soil is imported to the site, the soil will be from a NPS approved site.
Air Quality	<ul style="list-style-type: none">• Fugitive dust will be controlled by spraying water on the construction site.• To minimize the number of truck trips to and from the site, trucks will be fully loaded before leaving the site, when practical.
Noise Quality	<ul style="list-style-type: none">• To reduce noise only day-time construction will occur.
Water Resources	<ul style="list-style-type: none">• Appropriate agencies will be notified to ensure compliance with Federal laws. Rivers and Harbors Act Section 10/Clean Water Act Section 404 Permit will be obtained from United States Army Corps of Engineers prior to the start of construction of the MREC.• Best Management Practices will be used to minimize any potential soil erosion. A Stormwater Pollution Prevention Plan and Erosion Control Plan will be required.• Erosion control measures will not be removed until the site is permanently stabilized.• A floating boat dock will be constructed for the MREC to minimize impacts to water quality.• Permeable surfaces will be used for parking areas and access roads to control stormwater runoff where possible.• Best Management Practices will be in place for dredging activities, to minimize turbidity.
Floodplain/ Coastal Barrier Areas	<ul style="list-style-type: none">• To minimize impacts to floodplain and coastal barrier areas, the wet lab will be constructed on pilings and a floating boat dock will be constructed for the MREC.
Wetlands	<ul style="list-style-type: none">• Mangrove wetland mitigation plan includes mangrove revegetation along the Mangrove Lagoon.• Estuarine wetland mitigation plan includes wetland vegetation plantings and site rehabilitation of the peninsula.• A Section 404 Permit will be obtained from the Army Corps of Engineers prior to construction activities of the MREC.

Impact Topic	Mitigation Measure(s)
Vegetation	<ul style="list-style-type: none"> • Revegetation of disturbed areas will take place following removal of abandoned hotel debris and after construction of the MREC. • Revegetation at the abandoned hotel site will reconstruct the natural spacing, abundance, and diversity of native plant species and enhance migratory bird nesting (least tern) and provide suitable sea turtle nesting area as well. • Non-native invasive plants will be removed and the area will be re-vegetated with appropriate native vegetation.
Wildlife and Threatened and Endangered Species	<ul style="list-style-type: none"> • The bat mitigation plan will include the relocation of velvety free-tailed bats to bat houses from the abandoned hotel or other suitable roost site. Time of year restrictions will reduce impacts to bats during the maternity season. • Time of year restrictions will be in place for special status species. • Appropriate consultation will occur prior to construction activities for the MREC to reduce impacts to listed species. • Workers will be educated on special status species in the area and construction will halt if a listed species is discovered in the project area.
Visitor Use and Experience	<ul style="list-style-type: none"> • When possible, existing activities at SARI will be allowed to continue during construction, however active demolition areas and road construction areas will be restricted.
Aesthetics	<ul style="list-style-type: none"> • The MREC building will be designed to blend in as much as possible with natural settings.
Energy Conservation	<ul style="list-style-type: none"> • To the extent possible, the design and management of facilities will emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The NPS will also strive to reduce energy costs, eliminate waste, and conserve energy resources by using energy-efficient and cost-effective technology. Energy efficiency will be incorporated into the decision-making process during the MREC design and acquisition of facilities that emphasize the use of renewable energy sources. • The following energy conservation and sustainable resources will be included where practical and cost efficient: alternative power generation systems such as solar panels and windmills, high-volume rainwater collecting cisterns, and a reverse-osmosis freshwater production system. • Recycling debris materials from the abandoned hotel project site will occur where feasible.

PUBLIC INVOLVEMENT

External (public) scoping was conducted to inform various agencies and the public about the proposed actions to implement a MREC and to demolish an abandoned hotel structure at SARI. The initial scoping effort was the distribution of a newsletter which was bulk-mailed to over 500 persons including residents in the Salt River Bay area, local businesses, local agencies, and local government representatives, and posted in Christiansted at local businesses. The newsletter was also distributed to generate input on the preparation of the EA. A press release was sent to three local television stations (WSVI Channel 8, WTJX Channel 12, and TV2) and three local radio stations (WVIQ Sunny 99.5 FM, WJKC Island 95 FM, and WSTX AM/FM). Additionally, three newspapers (St. Croix Avis, Daily News, and VISource) posted the press release. With this press release, the public was notified of the proposed actions, notified of the upcoming scoping meeting, and given 30 days to comment on the project.

A public scoping meeting was held on August 22, 2006, from 5:30 p.m. to 8:00 p.m. at the Christiansted National Historic Site located at the Guinea Company Warehouse (old post office building) 2100 Church St., #100, Christiansted, Virgin Islands. A total of 24 individuals attended the meeting. Public comments received during the meeting and through the mail were addressed in the EA.

The EA was made available to the public and local, State, and Federal agencies for review and comment on June 9, 2008, and a second public meeting was held on June 24, 2008, at the same time and location as the previous meeting. A press release announcing the public meeting and availability of the EA was sent to the same local television and radio stations as previously listed. The EA was also provided to the public and to state and federal agencies through the NPS website. Additionally, the same three newspapers posted the press release. A total of 19 individuals attended the public meeting. The public comment period on the EA ended on July 25, 2008. Comments received are addressed in an Errata Sheet attached to this FONSI.

Errata Sheet on the Environmental Assessment for the Proposed Marine Research and Education Center and Abandoned Hotel Demolition

Comments were received during the public comment period that warrants the preparation and distribution of an errata sheet on the above referenced Environmental Assessment. This sheet will become part of the project file. The comments and responses are as follows:

1. **Comment:** The National Park Service states that the mangrove lagoon, in which the dock and intake line will be located, is within Park boundaries. However, there is no documentation provided to substantiate the Park's findings. NPS must provide proof of legal interest for the submerged lands it proposes to occupy in order that CZM may concur with NPS findings of a *Federal Consistency Determination*. If the submerged lands are not within the NPS boundaries, then a CZM Major Water Permit Application will be required.

a. **Response:** The question of ownership of areas affected by the preferred alternative will be resolved prior to submittal of permit applications for the MREC. Although NPS is not required to comply with territorial laws and regulations for actions on federal lands, as a responsible steward of the environment, NPS complies with applicable environmental laws and regulations, to afford the highest protection of resources. In the EA, we evaluate the preferred alternative as two distinct actions – 1) development of the MREC and associated facilities (Chapter 4); and 2) demolition of the hotel structure and construction of an access road (Chapter 5). The request for Federal Consistency Determination, filed in a letter dated June 4, 2008, to the Virgin Islands Government, Coastal Zone Management Program, is specific to the hotel demolition and road construction and states that it does not address the development of the MREC. The hotel demolition and road construction does not include construction activities in the lagoon, or other water bodies. As noted in the EA, Section 4.3.2, page 4-13, a request for Federal Consistency Determination for the MREC, which would include construction of the dock and intake line, mentioned above, will be filed at a later date.

2. **Comment:** The project will disturb more than 1 acre and therefore will need to submit a Notice of Intent and Stormwater Pollution Prevention Plan for coverage under the VI Construction General Permit.

a. **Response:** A Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SPPP) will be prepared by the on-site contractor and submitted to USVI DEP before construction of the haul road. A NOI and SPPP will be prepared separately for the MREC; the NOI and SPPP for the MREC will be submitted to the USVI DEP by the on-site contractor before construction.

3. **Comment:** If there is any in/above water work anticipated a Water Quality Certificate will be required prior to beginning work.

a. **Response:** A 401 Water Quality Certificate will be obtained and approved by the USVI DPNR/DEP prior to any in-water work for the MREC.

4. **Comment:** Many of the Choosing by Advantages (CBA) values assigned to the factors appear to be arbitrary in nature and do not reflect the relative importance of the factor to the ecosystem as a whole. Several important factors were left out of the analysis, including but not limited to beach lighting, public access to the facility, etc.

a. **Response:** The summary of the CBA process that was presented in Section 2.1.4 of the EA and in Appendix A was a brief summary of the 2-day CBA process. The summary included a list of factors used in the process, but many of the components that contributed to the factors were not included in this summary. The importance of these components and the effects of these components were considered on the Salt River Bay ecosystem as a whole.

Concerns related to RTE species (i.e., noise, disturbance, beach lighting) were not specifically discussed in detail during the CBA process but would fall under the factor *RTE Species* presented in Section 1.2 *Factors Considered but Dismissed* in Appendix A.

Public access to the facility was covered under Section 1.1.2 *Meet the Needs of the Marine Research and Education Center* in Appendix A.

5. **Comment:** The “minimize impacts to floodplains” lists one site as having no impact and assigning a value of 10, a second site has low impact, yet is assigned a value of 15. The site assigned medium impact has a value of 0.

a. **Change to Document:** In Appendix A Figure 1-1 Under “minimize impacts to floodplains” the score for the South Site will be changed to 15 and the score for the West Site will be changed to 10.

6. **Comment:** We agree that the approach taken to identify the best site is correct, however it appears that it has left out important factors and was carelessly applied. We do not concur that the east location is the preferred alternative.

a. **Response:** The project team held a 2-day CBA meeting in Christiansted, St. Croix, Virgin Islands. Experts on park resources and the CBA and NEPA processes attended the CBA meeting. The participants included NPS staff from Salt River Bay National Historical Park and Ecological Preserve, Southeast Regional Office (SERO), Southeast Regional Inventory and Monitoring Program, and the Southeast Archaeological Center (SEAC). The meeting also included a representative from the University of Virgin Islands and staff from EA Engineering and HNTB, contractors working on the EA. The project team spent two days deciding on factors and attributes (issues affecting the alternatives) for the process that were grouped under four functions (protecting cultural and natural resources, meeting the needs of the MREC, providing for visitor enjoyment, and providing benefits to the local community) that the MREC must serve in order to be feasible. These functions included factors and attributes that contributed in many ways to the effects on the Salt River Bay ecosystem as a whole. The summary of this CBA process presented in Section 2.1.4 and in Appendix A of the EA was a brief summary of the 2-day process. Overall, the purpose of the CBA process was to determine the feasibility of three alternatives for siting a proposed MREC at the park. The East Site scored the highest and was considered the most feasible site for the MREC. Based on this result the East Site was identified as the Proposed Action for analysis in the EA. The impact analysis performed in the EA confirmed that this alternative was the Preferred Alternative. The East Site was also determined to be the Environmentally Preferred Alternative.

7. **Comment:** No information is provided on sea turtle lighting conditions and restrictions. We would like to see plans for addressing turtle lighting issues.

a. **Response:** The National Park Service will ensure that all building plans consider and include actions and practices that will protect sea turtle nesting beaches, and maintain dark skies. Sea turtle lighting requirements will be accommodated during design of the facilities.

b. **Change to Document:** The following text will be added to Section 4.6 Threatened and Endangered Species.

Disorientation from artificial lighting on beaches can lead to the death of sea turtle hatchlings emerging from a nest at night and can also discourage or disorient adult female turtles from approaching a beach to lay eggs and after egg deposition during departure. Nighttime lighting at the MREC will be designed to comply with requirements for nesting sea turtles.

The following text will be added to Chapter 7 Mitigation Measures, Wildlife and Threatened and Endangered Species:

Nighttime lighting at the MREC will be designed to comply with requirements for nesting sea turtles.

8. **Comment:** The nesting season for least terns, should be adjusted to include the entire nesting period (April 1st – August 1st).

a. **Response:** The least tern nesting period will be updated.

b. **Change to Document:** All references to the least tern nesting period throughout the document will be changed to April 1 to August 1.

9. **Comment:** The numbers of listed endangered and threatened species varies throughout the EA. Some of the Federally listed species listed in the EA have not been listed for several years, others have been left off.

a. **Response:** The list of federally endangered and threatened species will be updated.

b. **Change to Document:** The following species will be added to Appendix B, Table B-2:

Scientific Name	Common Name	Federal Status
<i>Caretta caretta</i>	Loggerhead Sea Turtle	Threatened
<i>Monachus tropicalis</i>	Caribbean Monk Seal	Endangered
<i>Balaenoptera physalus</i>	Finback Whale	Endangered
<i>Physeter catodon</i>	Sperm Whale	Endangered
<i>Calyptanthus thomasi</i>	Plant No Common Name	Endangered
<i>Catesbaea melanocarpa</i>	Plant No Common Name	Endangered

The following species will be omitted from Appendix B, Table B-2:

Scientific Name	Common Name	Federal Status
<i>Epicrates monensis granti</i>	Virgin Islands Tree Boa	Endangered
<i>Falco peregrinus</i>	Peregrine Falcon	Endangered

All references to the peregrine falcon, humpback whale, and sei whale as Federally listed species will be omitted.

10. **Comment:** Further, protected species, although not listed as endangered or threatened include the agouti, red footed tortoise and green iguana, both of which may be found within park boundaries.

a. **Response:** These species are listed on CITES (United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora) and this information will be added to the EA.

b. **Changes to Document:** Page 3-28, Site-Specific Listed Species: Text will be added to read:

The red-footed tortoise and the green iguana are listed on CITES (United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora), Appendix II. This states that their trade must be controlled, so as to not harm species in the future. The agouti is also listed in CITES, but in Appendix I instead of II. Appendix I lists the most endangered species among the CITES listed animals. The green iguana has been sited on the east side of the park (NPS personal communication, Hillis-Starr and Hardy).

11. **Comment:** There is no evidence of feral pigs on St. Croix. Additionally, there are no feral mongoose, deer, rats or mice, these animals have never been domesticated and therefore can not “become feral” they were wild animals that were introduced.

a. **Response:** All references to pigs will be omitted. The species listed as feral will be changed to introduced.

b. **Changes to Document:** Page 3-19, Mammals: Text will be changed to read:

The domestic cat (*Felis domesticus*) and domestic dog (*Canis familiaris*) have established feral populations on the island. Approximately 6 species of terrestrial mammals are non-native, including: small Indian mongoose (*Herpestes javanicus*), white-tailed deer (*Odocoileus virginianus*), goat (*Capra hircus*), roof rat (*Rattus rattus*), Norway rat (*Rattus norvegicus*), and house mouse (*Mus musculus*) (DPNR/DFW 2005).

12. **Comment:** There is no record of the thriving population of donkeys within the proposed west site.

a. **Response:** All references to donkeys will be omitted. See Response to Comment #11.

13. **Comment:** Designated critical habitat for the listed coral species extends to the 90-ft depth contour. Coastal construction or development can have an impact on this critical habitat, statements of the nature that the distance from the mouth of the bay to the construction sites are far enough that there would be no impact are not sufficient. Sedimentation and silt from dredging need to be managed. Descriptions of the management plans should be included.

a. **Response:** In accordance with the Federal and Territorial requirements for T&E species, ESA Section 7 Consultation would be required with USFWS, NMFS Southeast Region Office, and the USVI DPNR/DFW prior to construction and dredging activities for the MREC. NMFS has already stated in a September 8, 2006 letter that a biological evaluation (BE) would be required as part of the planning and design stages for the MREC. If dredging is determined to be needed, and when the location and details of the dredging activities are known, then these impacts

would be analyzed in detail at an appropriate time in conjunction with the required BE and other required permits that may be obtained for this project at a later date in time. All documents (including a CWA Section 404(B)(1) Evaluation, an EFH Evaluation and a CWA Section 401 Water Quality Certification) required to support a permit for dredging along with a dredging permit would be obtained prior to the initiation of dredging activities. All anticipated impacts associated with dredging would be evaluated in detail in these documents.

14. **Comment:** The NPS already maintains a facility overlooking Columbus landing, we fail to see the necessity of construction of new buildings with a view of Columbus landing, and this should not be one of the criteria for selecting a site.

a. **Response:** Having a view of the Columbus Landing Site was not a criterion for site selection.

15. **Comment:** One of the conditions of the Choosing by Advantages Process was the length needed to pump clean sea water to the facility. The west site was chosen because of the distance was shortest, however this short distance traverses fringing coral and other marine features that would be reduced or not be present in other sites. Just evaluating the distance in a vacuum of other data, indicates that a short distance is preferable even though it may cause the greatest environmental damage.

a. **Response:** Impacts to coral, fish, seagrasses, benthos, and underwater cultural resources were evaluated under “*Minimize Impacts to Water Resources*” of the CBA process found in Appendix A.

16. **Comment:** Summary of comments – Concur the hotel should be demolished. Agree that a MREC should be established and Salt River would be a viable location. The CBA process is an appropriate tool to identify the best location for the MREC, however it contained many flaws. Do not concur that the East Site is the preferred alternative, the south site would be more appropriate.

a. **Response:** We appreciate your support for the MREC facility and the demolition of the abandoned hotel structure. Our analysis of the impacts from the proposed MREC was thorough and determined that the Preferred Alternative would be the East Site. As stated earlier in response to Comment #6, the East Site scored the highest and was considered the most feasible site for the MREC through the CBA process. In addition, the East Site was verified as the Preferred Alternative through the impact analysis performed in the EA. The East Site was also determined to be the environmentally Preferred Alternative.

17. **Comment:** NMFS requests that the NPS provide information regarding the potential impacts to listed species and their habitat from the proposed action. Information regarding listed species was included except for that related to the proposed designation of critical habitat for listed elkhorn and staghorn corals, which includes hardground and coral reef areas in the vicinity of the proposed marine center. The EA should be revised to include information on the proposed designated critical habitat rule for listed corals, which is due to be finalized in November 2008, and the potential impacts from construction and operation to critical habitat.

a. **Response:** Project impacts specifically to coral are included in **Section 4.5.1 Reefs/Hardbottom** and include the following: “Minor, adverse, short-term impacts to the coral reefs and hardbottom substrate would occur from installation of the seawater supply pipeline. The final location of the seawater supply pipeline is unknown at this time and would be dependent on future hydrodynamic and water quality studies and would consider locations that

would not impact protected corals. The pipeline would probably be located in the open ocean away from the bay tidal plume and beyond the coastal high-energy region, which means that the pipeline would encounter reefs and hardbottom substrate but only where absolutely necessary. The impacts would be primarily a short-term increase in the turbidity in the area of the pipeline installation. This effect would be temporary and would dissipate quickly after the installation ceases and suspended sediments resettle. Therefore, the installation of the seawater supply pipeline would have short-term minor impacts on the coral reef. Impacts to the hardbottom substrate would occur from the installation of the pipeline under the coral reef and from the tethering of the pipeline to this substrate. Alignment of the pipeline would be selected based on avoiding coral altogether if feasible, avoiding areas of high quality coral reefs, or routing the pipeline into areas with the least amount of coral to the maximum extent possible. There are many areas along the northern shore of the East Site where coral density is low due to past hurricane debris piling, several feet of coral cobble, and high surf conditions; this area also provides a relatively short distance to deeper water for the seawater supply line. The intake for the seawater supply pipeline could potentially entrain coral gametes in the water column during the spawning season. This may result in some loss of gametes but no impact to the coral reef is expected.”

18. **Comment:** The EA does not contain details regarding construction methods, benthic surveys, and facility operations, nor does it contain conclusions regarding the likelihood for impacts to listed species to occur during project construction and operation.

a. **Response:** Details on construction methods, surveys, and facility operations will be developed following the signing of the FONSI. The construction of the MREC will not begin until all applicable approvals and permits are obtained. Impacts to listed species are included in Section 4.6, Threatened and Endangered Species as well as impacts and mitigation to listed species in Appendix D – Wetlands and Floodplains Statement of Findings.

19. **Comment:** NMFS recommends that NPS prepare and submit a biological evaluation for the project as part of the Section 7 consultation. The evaluation should include the following:

1. A new benthic and bathymetry study should be prepared for the proposed location of the seawater intake pipeline and dredging activities.
2. Details on sediment and erosion control measures to be implemented during the demolition of the abandoned hotel, construction of the access road, and construction of the MREC including the boating facilities should be provided.
3. Details on stormwater control measures to be implemented during both construction and operation of the facilities.
4. Avoidance and minimization measures implemented during the project design, construction, and operational phases to reduce potential impacts to listed species and their habitat resulting from project construction and from research and maintenance activities associated with the operation of the facilities.
5. Mitigation proposed for unavoidable adverse impacts to listed species and their habitats including those associated with the operation of the facility such as maintenance dredging and other activities associated with the boating facilities and research activities that could result in impacts to listed species and their habitat.
6. An effect analysis and determination evaluating the potential adverse impacts of the action on listed species and their habitat.

a. **Response:** A biological evaluation will be submitted as part of the planning and design stages of the MREC. Impacts from the MREC will be evaluated in more detail at that time. Specifically, avoidance and minimization measures are discussed in the EA, Appendix D – Wetlands and Floodplains SOF and include the following:

“During the demolition process, any incidental impacts to the adjacent forested mangrove wetland would be avoided by placing upright sections of plywood between the mangroves and the demolition activities. These barriers will be placed all along the peninsula roadway, adjacent to hotel, and along bay side (south side) of peninsula where there are mangroves (adult plants, propagules, and rhizomes). This will protect mangroves from accidental impact from heavy machinery and prevent sediment from entering the lagoon during project in event of heavy rain. If the hotel will be demolished via mechanical methods versus using explosives, dust would not be an issue for the adjacent mangroves (USACE 2006). If explosives are used, dust may be an issue for the nearby mangroves; however the use of explosives are not planned for the hotel demolition. The NPS will have an observer on-site during demolition process to ensure that the barriers function to protect the mangroves. In addition to the hotel demolition, the park is proposing to construct a haul road for the construction vehicles to get to and from the site, and to haul out materials produced from the demolition of the abandoned hotel structure. Following demolition activities, the haul road would be improved and would serve as the main access road to the park. The exact route of the haul road is currently unknown but will stay out of flood plain above 20 foot contour. A pond and a tidal gut potentially exist in the vicinity of the proposed haul road. As more detailed survey and site-specific information becomes available, potential impacts to existing wetlands from the haul road will be avoided and minimized whenever possible. The NPS will work closely with the USDA NRCS to ensure that the haul road design is consistent with Federal Executive Order 11990 – Protection of Wetlands and *Director's Order #77-1* (Wetland Protection). Additionally, removing the impervious structures (hotel structure and associated building materials) and re-vegetating these areas would return the site to a more natural setting which would benefit the long-term water quality in the bay and ultimately benefit the marine wetlands characterized as seagrasses mapped in the vicinity of the East Site. The demolition and road construction improvements have the potential to temporarily and locally increase turbidity in Salt River Bay, which may potentially cause a short-term, negligible, indirect adverse impact to seagrasses. It is recognized that the potential for negligible impacts to seagrasses as a result of increased turbidity may occur, but significant impacts to marine wetlands, specifically seagrasses, are not anticipated as part of this project...”

“...The MREC Preferred Alternative (East Site Alternative) and the Proposed Action of demolishing the abandoned hotel structure both propose development and restoration within wetlands and the 100-year floodplain. Appropriate agencies (USACE and the USVI DPNR) have been notified and consulted on the proposed project to ensure compliance with applicable regulations; any required permits (404 permit) will be obtained from the USACE prior to the start of construction. In addition, during the entire construction process standard sediment and erosion control measures (Erosion Control Plan), such as silt fences and/or sand bags, BMPs, and stormwater management techniques would be used to minimize any potential soil erosion and to comply with both *Procedural Manual #77-1: Wetland Protection* and *Procedural Manual #77-2: Floodplain Management*. A Stormwater Pollution Prevention Plan (SWPPP) would be required and implemented prior to, during, and following ground-disturbing activities that is consistent with the Territorial Pollutant Discharge Elimination System (TPDES). Permeable paved surfaces would be used for the parking areas at the MREC and for the access road and parking lot at the abandoned hotel location to contribute to reducing stormwater runoff. Additionally, for the demolition of the hotel structure, it is recognized that the potential for negligible impacts to seagrasses along the shoreline areas of the East Site as a result of increased

turbidity may occur, but significant impacts to marine wetlands, specifically seagrasses, are not anticipated as part of this project. Erosion and sediment controls, and BMPs would be employed during demolition and road construction/improvement activities to minimize impacts to Salt River Bay. A detailed, stand-alone document describing the project phasing plan and the mitigation plan to compensate for wetland impacts has been drafted for use during construction activities...The wetland mitigation and rehabilitation of the peninsula includes planting native herbaceous wetland plant species that currently exist on-site.”

20. **Comment:** In addition to Section 7 consultation, given the presence of mangrove wetlands and salt flats, seagrass beds, coral reefs, and colonized hardgrounds in the project area, an essential fish habitat consultation with NMFS may be necessary pursuant to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

a. **Response:** If essential fish habitat consultation with NMFS is found to be needed for the MREC then the NPS will conduct this consultation.

21. **Comment:** I recommend that we have the lab, dormitories, library, cafeteria, etc. built on the west side of the park. The west side is more visible with residential communities and the aesthetic view of the east site is natural with coastlines, open grasslands, mangrove communities, great views of the bay.

a. **Response:** Through the Choosing by Advantages (CBA) process as discussed previously under comment # 6 as well as through the evaluation of the three sites East, West, and South in the EA, the East Site was found to be the most suitable location for the MREC.

22. **Comment:** Flooding can occur around the mangrove lagoon. For this and other reasons I suggest that you build the marine center facilities on the west side of the park. Light pollution on the east side of the park could also be another factor, especially impacting wildlife.

a. **Response:** Non-water dependent buildings associated with the MREC were purposely placed outside of the floodplain at the East Site to avoid impacts to the floodplain as well as to avoid flooding impacts to the buildings. A State of Findings for floodplains was completed, which includes appropriate mitigation measures for floodplains (see Appendix D). Only those facilities that are water-dependent were placed in the floodplain which includes the boat dock and wet lab. The Wet Lab would be constructed on pilings above the flood zone so as to not impede the function of the floodplain and to avoid flooding impacts to the building.

Nighttime lighting at the MREC will be designed to comply with requirements for nesting sea turtles and maintain dark sky.

23. **Comment:** I would suggest investigating the area for the haul road to see if there are any endangered or rare plants or animals.

a. **Response:** A local plant expert from the USDA/NRCS , Rudy O'Reilly, has been to the East Site and consulted with regarding listed species occurring along the Haul Road; he has determined that listed species are not likely to occur along the Haul Road. Additionally, **Section 5.6 Threatened and Endangered Species** states that: “There is no documentation that endangered or threatened listed species have been observed at this location on the peninsula or along the Haul Route, but a site-specific survey in the vicinity of the abandoned hotel site and Haul Route has not been conducted. If listed species are observed on the terrestrial habitats during any phase of the proposed action, the appropriate resource agencies, including the USFWS

and the USVI DPNR, would be contacted prior to any additional work that is completed in the area. Coordination with these agencies would be conducted to determine the appropriate action or mitigation at this time. All efforts would be made to avoid impacts to any potential terrestrial listed species during every phase of this project.”

24. **Comment:** The former NOAA Center could be a possible site for the construction of the marine research and education center. The old marine facilities still exists and obtaining a major coastal zone permit would be easier.

a. **Response:** The former NOAA Undersea Research Center was considered as a possible location for the MREC. The site as well as reusing the existing facilities at the site was evaluated as the South Site Alternative in the EA. Through the Choosing by Advantages (CBA) process as discussed previously under comment # 6, as well as through the evaluation of the South Site in the EA, the East Site was found to be a more suitable location for the MREC.

25. **Comment:** I have concerns about the development of the marine research and education center on the east side of the park. I believe this area can be replanted with native and approach exotic species of plants.

a. **Response:** Appendix D – Wetlands and Floodplains SOF describes in detail the planting plan for the peninsula on the East Site and includes: “The wetland mitigation and rehabilitation of the peninsula includes planting native herbaceous wetland plant species that currently exist on-site. After consultation with personnel from the USDA NRCS that are familiar with the peninsula site, it has been determined that grading, but no soil amendments prior to wetland planting will be required (O’Reilly 2006). Once the debris and hotel demolition is completed and all non-natural materials are removed from the peninsula, no fill will be needed and the location is expected to support hydrophytes naturally. The native wetland herbaceous forb species to be planted include saltmeadow cordgrass (*Spartina patens*), crabgrass (*Sporobolus virginicus*), and potentially beachgrass (*Distichlis spicata*). The wetland ground cover species sea purslane (*Sesuvium portulacastrum*) will also be planted at this site as well. These wetland species have been observed on-site and will be harvested from existing locations at the East Site, through the splitting of groupings. The type of herbaceous propagules used will be plugs and the distance between plantings will be dependent on the amount of funding and available plant materials.” “The wetland plantings will occur along the shoreline of the peninsula to assist with shoreline stabilization. The more interior portions of the peninsula will be conserved as open areas with sparse vegetation (crabgrass, sea purslane, and some buttonwood) to attract the avian species, least tern.

Additionally, Section 4.4.1 Plants also discusses native vegetation and the removal of exotics: “Replanting native trees, shrubs, and maintained grasses at the site would occur regardless of which alternative is selected. Additionally, the removal of non-native invasive species would be attempted. Existing, non-native invasive plant species such as African guinea grass and tan tan would be removed and replaced with native vegetation species. The replacement of non-native invasive species with native plant species would have a long-term, moderate, beneficial impact on the terrestrial wildlife species and other vegetation species that inhabit the area as well as the greater island of St. Croix. Non-native invasive species threaten the biodiversity of fragile island ecosystems such as St. Croix.”

26. **Comment:** I believe trails should be a critical part of the park’s landscape.

a. **Response:** Constructing trails within SARI is not part of this project; trails within SARI would be a General Management Plan (GMP) issue.

27. **Comment:** The park and the community can address the damage caused by off-road vehicles by reducing human impacts on the area by creating trails, possible camp sites, etc.

a. **Response:** Constructing trails and camp sites within SARI is not part of this project; these features would be addressed in a General Management Plan. However, implementation of the MREC at the East Site would improve the security on the east side of the park. Non-authorized vehicles would not be allowed to enter the park. This park presence would ultimately decrease and eliminate damage to the site caused by off-road vehicles.

28. **Comment:** I suggest that the Superintendent have a public tour of the east side of the park. Many residents never see the eastern side of the park. The Judith's Fancy guard gate staff somehow intimidates the public from entering on the east side of the park.

a. **Response:** Public access to the east side of the park is now only available through the private homeowners association access at Estate's Judith's Fancy. With the demolition of the abandon hotel and creation of the haul road/park access road NPS will be able to begin controlling its park property and providing for safer and more enjoyable access to the east side of Salt River Bay NHP & EP.

29. **Comment:** Any site which will be adversely affected, must undergo a Phase II Testing and Evaluation prior to the proposed Haul Road construction. These sites may also require Phase III Data Recovery mitigation as well. These issues will be addressed as part of the Section 106 compliance review process prior to the issuance of any earth-change permits.

a. **Response:** As long as the existing road bed for the Haul Road is followed with minimal intrusions into areas other than the existing road bed, no major impacts are anticipated. However, if the road design requires construction in new undisturbed areas then a Section 106 compliance review process would occur.

30. **Comment:** The draft EA's omission of a critical cultural resource – Cape of the Arrow from all relevant maps, descriptions, definitions, discussions, conclusions, etc., and inconsistencies concerning acceptable levels of development at SARI have a direct bearing on questions of accuracy and balance.

a. **Response:** The site was not discussed in detail because there will be no development on any archaeological site including the Cape of the Arrow.

31. **Comment:** The Cape of the Arrows was part of the description in the 1972 National Historic Landmark nomination for the Columbus Landing Site. However it is not mentioned in the draft EA for the proposed MREC and was omitted from all relevant maps, descriptions, definitions, discussions, and conclusions.

a. **Response:** The site will be included in the text.

b. **Change to document:** "Cape of the Arrows" will be added Figures 2-1 and 3-1. It will also be added throughout the document as appropriate (i.e., when the Columbus Landing Site is mentioned).

32. **Comment:** Cape of Arrows was not included in the elements which constitute the cultural landscape. Cape of the Arrow is included in the proposed National Historic Landmark boundary expansion which includes the land around the bay itself. It was not part of the criteria used to develop the conclusions published in the draft EA.

a. **Response:** All archaeological sites were considered when developing the impacts to cultural landscape therefore, Cape of the Arrows was included. Cape of the Arrows will be added to this statement to clarify.

b. **Change to document:** The following text will be changed on page 3-37:

The elements of this landscape should include, at a minimum, Cape of the Arrow, the Columbus Landing Site, Fort Salé, the Bay itself, and the land surrounding the Bay.

33. **Comment:** All MREC site alternatives, including the Preferred Alternative will create serious visual intrusions, diminish the integrity of the Columbus Landing National Historic Landmark, virtually destroy any possibility to extend the NHL boundary to include “Cape of the Arrow”, and the modern intrusion of the MREC on the scenic vistas will be overwhelming if not horrendous.

a. **Response:** Over the past five to seven years development in the Salt River Bay watershed has accelerated. The construction of new homes has occurred within 1,200 ft to the northwest and west of the Columbus Landing Site within the last three years. Construction of one new home is completed and another has just begun. Additionally, construction has been occurring all around the ridgeline throughout the bay. The MREC will be constructed to shield its view from the Columbus Landing Site. This will be accomplished by using natural materials, re-planting the hillside with native plants and trees and by blending in with the natural landscape as much as possible to not further degrade the viewshed that has already been significantly impacted since establishment of the park in 1992. Section 106 and Section 110 compliance are required and will be completed for this project. Applicable approvals associated with concurrence for construction of the MREC will be obtained from the VI SHPO following completion of the EA and the signing of the FONSI, but prior to the start of construction of the MREC.

34. **Comment:** The extent, area, or size of the suggested “Cultural Landscape” Section 3.8.4 should include terrestrial archaeological sites at Estate Judith’s Fancy as well as the Columbus Landing Site.

a. **Response:** All archaeological sites were considered when analyzing the cultural landscape.

35. **Comment:** Based on the eligibility of the “new NHL boundary description”, which includes “land around the bay itself,” page 3-37 has been very considerably understated.

a. **Response:** See response to Comment #32.

36. **Comment:** Complete Sections 106 and 110 Assessments should be completed and included as an addendum to the final Environmental Assessment.

a. **Response:** Sections 106 and 110 Consultation and Assessment is ongoing and will continue after completion of this EA and the signing of the FONSI. Applicable approvals associated with construction of the MREC will be obtained from the VI SHPO following the signing of the FONSI but prior to the start of the construction of the MREC.

37. **Comment:** The proposed MREC campus was not contemplated when the enabling legislation was drafted. The Management Objectives and the Land Protection Plan do not provide guidelines for the number of buildings proposed for the MREC in the EA. Has the NPS amended whether the Management Objectives or the Land Protection Plan and if so was this accomplished through the mandated public planning process, with the requisite notification in the local media?

a. **Response:** The proposed MRECs consistency with Management Objectives and the Land Protection Plan will be addressed in the Park's General Management Plan (GMP). However, funding of a GMP is still years away and NPS is proceeding with initiatives that meet the mission of the park, as described in the enabling legislation. The enabling legislation for SARI cited "education and research" as within the mission of the park making the proposed MREC consistent with the park's mission. The proposed MREC is consistent with the Coral Reef Protection Act of 1999 and the U.S. Ocean Action Plan of 2004. The MREC would be a facility that would be located within the boundaries of the park on park property that would further support the park mission and goals for preservation, conservation and education.

38. **Comment:** The use or adoption of modern (non-historical) names near "Cape of the Arrow" (i.e., Mango Creek, Crescent Bay, and Crescent Beach) all of which have been introduced in recent years is offensive and should be strenuously discouraged.

a. **Response:** Specific names of man-made features in the park have not been developed at this time. However, the use of historical names vs. non-historical names will be considered during the naming process. This naming process will go through peer review, including the VI SHPO, who will be consulted for review and approval of new names assigned to this historic area.

39. **Comment:** An engineering study of the abandoned hotel building has not been done, but it should be. A cost benefit analysis should be done of the two alternatives.

a. **Response:** NPS conducted several site visits to determine engineering soundness of the abandoned hotel. Site visits were made with NPS SERO Engineers, planners, cultural and environmental compliance experts and the local VI National Guard engineers. The building was determined unsafe for occupation and it would not meet safety or occupancy code for a federal work place. Based on these findings NPS chooses to remove the building and restore the man-made peninsula to a more natural condition, re-vegetation with native plants, and provide for wildlife use and low impact visitor use.

40. **Comment:** Could the hotel structure be used as the MREC?

a. **Response:** See response to Comment #39.